

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

SEP 18 2012

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Nathaniel S. Kendle Operations Support Manager Aventine Renewable Energy, Inc. 7201 Port Road Mt. Vernon, Indiana 47620

Re: Aventine Renewable Energy, Inc. Notice of Violation and Finding of Violation

Dear Mr. Kendle:

This is to advise you that the U.S. Environmental Protection Agency has determined that the Aventine Renewable Energy, Inc. (Aventine) facility at 7201 Port Road, Mt. Vernon, Indiana (facility) is in violation of the Clean Air Act (CAA) and associated state air pollution control requirements. We are issuing to you a Notice of Violation and Finding of Violation (NOV/FOV) for these violations.

The CAA requires the development of Primary and Secondary National Ambient Air Quality Standards to protect public health and welfare. To attain and maintain these standards, each state is required to develop an implementation plan. Indiana's State Implementation Plan (Indiana SIP) requires you to take reasonably available measures to prevent emissions of nitrogen oxides (NO_x), volatile organic compounds (VOCs), particulate matter (PM) and hazardous air pollutants (HAPs), including acetaldehyde. The purpose of these limits is to help protect the public from unhealthy exposures to these pollutants. Acetaldehyde can acutely irritate eyes, skin and the respiratory system. Chronic exposure to high levels of acetaldehyde has been shown to result in erythema, coughing, pulmonary edema, and necrosis. Acetaldehyde is also a probable human carcinogen. NO_x and VOCs contribute to ground level ozone, which can irritate the human respiratory system and reduce lung function. PM emissions, especially fine particulate, contribute to respiratory problems, lung damage and premature deaths.

The CAA also requires the development of standards for emissions of HAPs, called National Emission Standards for Hazardous Air Pollutants (NESHAPs). The purpose of the NESHAPs is to reduce HAPs, including acetaldehyde, which pose a threat to human health.

The CAA also requires the development of standards for the emissions of new sources, called New Source Performance Standards (NSPS). The purpose of the NSPS is to ensure that widely available pollution control technology is implemented as qualifying sources are constructed or modified.

EPA finds the following violations at the facility:

- 1. Indiana SIP requirements, including federally-enforceable construction permits. In violating the Indiana SIP requirements you are also violating Title I of the CAA and its implementing regulations, which require compliance with the terms and conditions of the Indiana SIP;
- 2. Section 111 of the CAA, 42 U.S.C.§ 7411, containing the Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, Subpart Kb; and
- 3. Section 112 of the CAA, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R. Part 63, Subpart FFFF.

Section 113 of the CAA gives EPA several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Greg Gehrig. You may call him at (312) 886-4434 or email him at gehrig.greg@epa.gov if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Aventine's compliance with the requirements of the CAA.

Sincerely,

George T. Czerniak Acting Director

Air and Radiation Division

Enclosure

cc: Andrea Alltop
Environmental Manager
Indiana Dept. of Environmental Management
1120 Vincennes Avenue, PO Box 128
Petersburg, IN 47567-0128

Phil Perry, Chief Compliance and Enforcement Branch Office of Air Quality Indiana Dept. of Environmental Management 100 North Senate Avenue, room IOCN 1003 Indianapolis, Indiana 46206-6015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Aventine Renewable Energy, Inc.) NOTICE OF VIOLATION AND
Mt. Vernon, Indiana) FINDING OF VIOLATION
)) EPA-5-12-IN-06
Proceedings Pursuant to)
the Clean Air Act)
42 U.S.C. § 7401 et seg.)

NOTICE OF VIOLATION AND FINDING OF VIOLATION

Aventine Renewable Energy, Inc. (you or Aventine) owns and operates an ethanol manufacturing facility at 7201 Port Road, Mt. Vernon, Indiana (the facility). At the facility, Aventine manufactures denatured ethanol and both wet and dried distiller's grain.

The U.S. Environmental Protection Agency is sending this Notice of Violation and Finding of Violation (NOV/FOV) under Section 113 of the Clean Air Act (the CAA), 42 U.S.C. § 7413, to notify you that we have found violations of conditions specified in the Indiana State Implementation Plan (Indiana SIP); Section 111 of the CAA, 42 U.S.C. § 7411, and the implementing New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 at 40 C.F.R. Part 60, Subpart Kb (Subpart Kb NSPS); and Section 112 of the CAA, 42 U.S.C. § 7412, and the implementing National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 C.F.R. Part 63, Subpart FFFF (Subpart FFFF NESHAP).

Explanation of Violations

- 1. The CAA Title V, Indiana SIP and permit conditions relevant to this NOV/FOV are as follows:
 - a. Title V of the CAA, 42 U.S.C. § 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d) of the CAA, 42 U.S.C. § 7661a(d), provides that each state must submit to EPA a permit program meeting the requirements of Title V.
 - b. On July 21, 1992, 57 Fed. Reg. 32295, in accordance with Section 502(b) of the CAA, 42 U.S.C. § 766la(b), EPA promulgated regulations implementing Title V of the CAA.
 - c. Those regulations are codified at 40 C.F.R. Part 70. Section 502(a) of the CAA, 42 U.S.C. § 766la(a), and 40 C.F.R. § 70.7(b), provide that, after the effective

- date of any permit program approved or promulgated under Title V of the CAA, no source subject to Title V may operate except in compliance with a Title V permit.
- d. EPA approved Indiana's Title V program on December 4, 2001, 66 Fed. Reg. 62969.
- e. The Indiana Department of Environmental Management (IDEM) issued federally-enforceable New Source Construction and Part 70 Operating Permit
 No. 129-24836-0051(Title V Permit) for the facility on September 20, 2007. The facility submitted an application to renew this permit on December 19, 2011, but IDEM has not yet acted on the application.
- f. An emission limit for particulate matter and particulate less than 10 microns (PM/PM₁₀) of 0.05 pounds per hour (lb/hr) from the baghouses controlling emissions from the hammermills is required by Title V Permit condition D.1.1.
- g. An emission limit for PM/PM₁₀ of 0.02 lb/hr from the baghouses controlling emissions from the DDG loadout is required by Title V Permit condition D.1.1.
- h. An emission limit for PM/PM₁₀ of 0.26 lb/hr from the baghouses controlling emissions from the grain receiving (truck and rail dump pits) is required by Title V Permit condition D.1.1
- i. A pressure drop across the baghouses controlling emissions from grain receiving and the hammermills within the range of 1 to 6 inches of water (in H₂O) is required by Title V Permit condition D.1.7.b.
- j. An emission limit for nitrogen oxides (NO_x) of 0.0432 lb/mm BTU from RTO #2 is required by Title V Permit condition D.2.2.
- k. A minimum flow rate of 100 gallons per minute (gpm) of scrubbing liquor for 343 hours is required by Title V Permit condition D.3.6.
- 1. Aventine is required to record the operating pressure drop over the CO₂ scrubber on a daily basis as shown in Title V Permit condition D.3.6.
- m. Aventine is required to maintain the minimum temperature of 1600° F for both thermal oxidizers (RTO #1 and RTO #2) as shown in Title V Permit condition D.2.13a.
- n. Aventine is required to maintain the minimum temperature of 1600° F at the loadout flare as shown in Title V Permit condition D.4.7.a.
- o. Aventine is required to record continuous (one minute average minimum) flare combustion chamber temperature records as shown in Title V Permit condition D.4.8.b.

- 2. Subpart Kb NSPS provisions relevant to this NOV/FOV are as follows:
 - a. Since November 30, 2010, the facility has been subject to the requirements of Section 111 of the CAA, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart Kb.
 - b. Aventine was required to conduct visual inspections of volatile organic compound (VOC) liquid storage tanks TK6101 through TK6106 prior to filling the tanks per 40 C.F.R. § 60.113b(1) as incorporated in the Title V Permit Section E.2.
- 3. Subpart FFFF NESHAP provisions relevant to this NOV/FOV are as follows:
 - a. Since November 30, 2010, the facility has been subject to the requirements of Section 112 of the CAA, 42 U.S.C. § 7412, and Subpart FFFF NESHAP at 40 C.F.R. Part 63.
 - b. Since March 30, 2011, the facility has been required to submit an Initial Notification per 40 C.F.R. § 63.2515(b).
 - c. Since November 30, 2010, the facility has been required to submit a Notification of a Performance Test(s) per 40 C.F.R. § 63.2515(c), and conduct applicable performance tests.
 - d. Since April 29, 2011, the facility has been required to submit a Notification of Compliance Status per 40 C.F.R. § 63.2520(d), and Subpart FFFF NESHAP Table 11.
 - e. Since August 31, 2011, the facility has been required to submit a Compliance Report per 40 C.F.R. §§ 63.2520(b)(2), 63.2520(e), and Subpart FFFF NESHAP Table 11.
 - f. Since November 30, 2010, the facility has been subject to 40 C.F.R. § 63.2450(a) requiring compliance with the emission limits and work practice standards listed in Tables 1-10 of Subpart FFFF NESHAP for the following emission units:
 - i. Continuous process vents;
 - ii. Batch process vents;
 - iii. Storage tanks;
 - iv. Transfer racks;
 - v. Equipment leaks;
 - vi. Waste water streams and liquid streams in open systems; and
 - vii. Heat exchangers.
 - g. Since November 30, 2010, Aventine has been required to develop a startup, shutdown and malfunction (SSM) plan, as required by 40 C.F.R. § 63.6(e)(3).

4. The Title V Permit violations are as follows:

- a. Since August 29, 2011, the facility has failed to meet the emission limit for PM/PM₁₀ of 0.05 lb/hr from the baghouses controlling hammermills #2 and #4 (each separately) as required by Title V Permit condition D.1.1.
- b. Since September 1, 2011, the facility has failed to meet the emission limit for PM/PM₁₀ of 0.02 lb/hr from DDG loadout via a separate baghouse as required by Title V Permit condition D.1.1.
- c. Since October 5, 2011, the facility has failed to meet the emission limit for PM/PM₁₀ of 0.26 lb/hr from grain receiving via a separate baghouse as required by Title V Permit conditions D.1.1 and D.1.5.
- d. From January 1, 2011, until October 31, 2011, the facility failed to achieve a pressure drop across grain receiving and hammermill baghouses within the range of 1 to 6 inches of water (in H₂O) as required by Title V Permit condition D.1.7.b for a total of 76 days.
- e. From May 11, 2011, until August 30, 2011, the facility has failed to meet the emission limit for NO_x of 0.0432 lb/mm BTU from RTO #2 as required by Title V Permit condition D.2.2.
- f. Since August 30, 2011, the facility has failed to meet the emission limit for PM/PM₁₀ of 4.0 lb/hr from RTO #2 as required by Title V Permit condition D.2.4.
- g. Since August 31, 2011, the facility has failed to meet the emission limit for PM/PM₁₀ of 4.0 lb/hr from RTO #1 as required by Title V Permit condition D.2.1.
- h. Since September 1, 2011, the facility has failed to meet the emission limit for PM/PM₁₀ of 0.07 lb/hr from the fermentation process CO₂ scrubber as required by Title V Permit condition D.3.1.
- i. From December 1, 2010 until November 19, 2011, the facility failed to operate the CO₂ scrubber at a minimum flow rate of 100 gpm of scrubbing liquor for 343 hours as required by Title V Permit condition D.3.6.
- j. From January 1, 2011 until October 31, 2011, the facility failed to record the operating pressure drop over the CO₂ scrubber for 35 days as required by Title V Permit condition D.3.6.
- k. From January 1, 2011 until October 31, 2011, the facility failed to maintain the minimum temperature of 1600° F in the thermal oxidizers (RTO #1 and RTO #2) for 87 days as required by Title V Permit condition D.2.13a.

- 1. From January 1, 2011 until October 31, 2011, the facility failed to maintain the minimum temperature of 1600° F at the loadout flare for 52 days as required by Title V Permit condition D.4.7.a.
- m. From January 1, 2011 until August 11, 2011, the facility failed to record continuous (one minute average minimum) flare combustion chamber temperature records as required by Title V Permit condition D.4.8.b.
- 5. Violations of the NSPS Subpart Kb are as follows:
 - a. The facility failed to conduct visual inspections of VOC liquid storage tanks TK6101 through TK6106 prior to filling the tanks per 40 C.F.R. § 60.113b(1) as incorporated in the Title V Permit Section E.2.
- 6. Violations of Subpart FFFF NESHAP are as follows:
 - a. Since March 30, 2011, the facility has failed to submit an Initial Notification per 40 C.F.R. § 63.2515(b) as incorporated in the Title V Permit Section E.6.
 - b. Since November 30, 2010, the facility has failed to submit a Notification of a Performance Test(s) per 40 C.F.R. § 63.2515(c), and conduct applicable performance tests as incorporated in the Title V Permit Section E.6.
 - c. Since April 29, 2011, the facility has failed to submit a Notification of Compliance Status per 40 C.F.R. § 63.2520(d) and Subpart FFFF NESHAP Table 11 as incorporated in the Title V Permit Section E.6.
 - d. Since August 31, 2011, the facility has failed to submit a Compliance Report per 40 C.F.R. § 63.2520(b)(2), § 63.2520(e) and Subpart FFFF NESHAP Table 11 as incorporated in the Title V Permit Section E.6.
 - e. Since November 30, 2010, the facility has not complied with 40 C.F.R. § 63.2450(a) requiring compliance with the emission limits and work practice standards listed in Tables 1-10 of Subpart FFFF NESHAP as incorporated in the Title V Permit Section E.6 for the following emission units:
 - i. Continuous process vents emissions;
 - ii. Batch process vents;
 - iii. Storage tanks;
 - iv. Transfer racks;
 - v. Equipment leaks;
 - vi. Waste water streams and liquid streams in open systems; and
 - vii. Heat exchangers.
 - f. Since November 30, 2010, Aventine has failed to develop a SSM plan, as required by 40 C.F.R. § 63.6(e)(3) as incorporated in the Title V Permit Section E.6.

Environmental Impact of Violations

- 7. All violations cited above result in elevated emissions of PM, NO_x and hazardous air pollutants (HAPs), particularly acetaldehyde.
 - a. PM emissions, especially fine particulate, contribute to respiratory problems, lung damage and premature deaths.
 - b. NO_x contribute to ground level ozone, which can irritate the human respiratory system and reduce lung function.
 - c. Acute expose to acetaldehyde results in irritation of the eyes, skin, and respiratory tract, as well as erythema, coughing, pulmonary edema, and necrosis. Chronic exposure to high levels of acetaldehyde has been linked to effects similar to alcoholism, slight anima, as well as nasal, trachea and kidney pathology. EPA lists acetaldehyde as a probable human carcinogen.

	9/17/12	100/1
Date		George T. Czerniak Acting Director
		Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-12-IN-06, by Certified Mail, Return Receipt Requested, to:

Nathaniel Kendle Operations Support Manager Aventine Renewable Energy, Inc. 720I Port Road Mt. Vernon, Indiana 47620

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

cc: Andrea Alltop Environmental Manager Indiana Dept. of Environmental Management 1120 Vincennes Avenue, PO Box 128 Petersburg, IN 47567-0128

> Phil Perry, Chief Compliance and Enforcement Branch Office of Air Quality Indiana Dept. of Environmental Management 100 North Senate Avenue, room IOCN 1003 Indianapolis, Indiana 46206-6015

On the Aday of September 2012.

Loretta Shaffer, Administrative Program Assistant

CERTIFIED MAIL RECEIPT NUMBER:

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